

REMARKS

The present application was filed on January 26, 2004 with claims 1-3. Claims 1-3 remain pending. Claim 1 is an independent claim.

In the outstanding Office Action dated August 8, 2006, the Examiner: (i) rejected claims 1 and 3 under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent No. 411295638A to Tomoyuki (hereinafter “Tomoyuki”); and (ii) rejected claim 2 under 35 U.S.C. §103(a) as being unpatentable over Tomoyuki in view of Japanese Patent No. 409164256A to Atsushi (hereinafter “Atsushi”).

With regard to the rejection of claims 1 and 3 under 35 U.S.C. § 103(a) as being unpatentable over Tomoyuki, Applicants respectfully assert that the cited reference fails to establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), as specified in MPEP § 2143. As set forth therein, M.P.E.P. §2143 states that in order to establish a *prima facie* case of obviousness, the cited reference must teach or suggest all the claim limitations. Applicants respectfully believe that Tomoyuki fails to teach or suggest all the limitations of claims 1 and 3.

Independent claim 1 recites a head mounted virtual image display unit that comprises a microdisplay and an optical system for directing an image signal for viewing by a user. The image signal is generated in accordance with the microdisplay. The unit further comprises an optical system mounting structure for supporting the optical system within the field of view of an eye of the user, a housing to substantially contain at least the optical system, and a light shield integrated with the housing and having an open position and a closed position. The light shield is positioned with respect to the optical system such that, in the open position, the image signal is viewed by the user with background light entering the optical system, and in the closed position, the image signal is viewed by the user with background light at least partially blocked from entering the optical system.

Tomoyuki discloses a “head mounted display device” with a “light shield cover,” not a “light shield” as recited in claim 1 (Tomoyuki Abstract). Applicants assert that the translation to the phrase “light shield cover” is misleading because the light shield cover of Tomoyuki is an encasing for an optical system, and not a movable/positionable light shield. Tomoyuki’s light shield cover shields an optical image from the surrounding outside environment, thereby allowing the user to view optical

images inside the head mounted display device without optical interference caused by external light.

This contention is supported by the text of the Abstract, which discloses that the “light shield cover... shields an optical path 8 between an image display screen 2 and a concave mirror 3 from the surrounding [environment].” Further, the Abstract describes an “opening only in the direction for the user to look” into. This reinforces the idea that Tomoyuki is describing an enclosed screen with a single opening; therefore, the light shield cover is a structural immovable encasing and not a movable/positionable light shield. Unlike Tomoyuki, the image display unit of the present invention has two optical openings. One opening allows the user to view a visual image and another opening optionally allows external light to enter the optical system in accordance with the position of the light shield.

Applicants respectfully disagree with the Examiner’s argument that claim 1 is obvious because Tomoyuki “at least partially blocked [background light] from entering the optical system.” Applicants assert that the Examiner mischaracterizes the present invention. Independent claim 1 recites a light shield having an opened and closed position. Thus, the light shield of the present invention may limit, allow or block background light from entering the viewing area. Tomoyuki’s device would fail to function properly if the light shield cover were removed. In light of this shortcoming, Tomoyuki describes and promotes an enclosed optical system. The Tomoyuki Abstract states that the light shield cover was intentionally designed to provide a dark background for viewing the optical image.

Although both Tomoyuki and independent claim 1 use the words “light shield,” a person of ordinary skill in the art would not consider the two descriptions equivalent in nature. Tomoyuki describes a non-removable light shield cover with a single opening. Tomoyuki fails to disclose a head mounted virtual display unit having a light shield with an open position and a closed position, such that in the open position the image signal is viewed by the user with background light entering the optical system, as recited in independent claim 1.

Dependent claim 3 is patentable at least by virtue of its dependency on independent claim 1, and also recites patentable subject matter in its own right. Dependent claim 3 recites a light shield that is “one of opaque, partially opaque, colored and polarized.” Tomoyuki fails to disclose the

utilization of a light shield of varying levels of transparency. As asserted above, Tomoyuki's optical system cannot function with external light. Accordingly, withdrawal of the rejection of claims 1 and 3 under 35 U.S.C. § 103(a) is therefore respectfully requested.

With regard to the rejection of dependent claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Tomoyuki in view of Atsushi, Applicants assert that dependent claim 2 is patentable for at least the reasons presented above with regard to independent claim 1 because Atsushi fails to remedy the described deficiencies of Tomoyuki. Further, Atsushi does not apply to Applicants' proposed claim because Atsushi does not teach a light shield within the context of complex optical imaging. Instead, Atsushi describes a light switch cover used on a pachinko machine. A person having ordinary skill in the art would find no motivation to combine the teachings found in Atsushi with Tomoyuki. Accordingly, withdrawal of the rejection of claim 2 under 35 U.S.C. § 103(a) is therefore respectfully requested.

In view of the above, Applicant believes that claims 1-3 are in condition for allowance, and respectfully requests withdrawal of the §103(a) rejections.

Respectfully submitted,



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